



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/782,643

02/19/2004

Stephen Dale Linam

AUS920031071US1

5501

35525

7590

11/13/2006

IBM CORP (YA)

C/O YEE & ASSOCIATES PC

P.O. BOX 802333

DALLAS, TX 75380

EXAMINER

GUYTON, PHILIP A

ART UNIT

PAPER NUMBER

2113

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,643

Applicant(s)

LINAM ET AL.

Examiner

Philip Guyton

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 21 recites "a computer program product in a computer readable medium." According to Applicant's specification, a computer readable medium may include "digital and analog communication links, wired or wireless communications links using transmission forms, such as, for example, radio frequency and light wave transmissions," (see page 24, lines 13-22). However, these examples do not belong to the group of a process, machine, manufacture, or composition of matter as required by 35 U.S.C. 101. Thus, claims 21-25 are directed to non-statutory subject matter and are therefore rejected under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2113

3. Claims 1, 8-11, 18-21 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,332,180 to Kauffman et al. (hereinafter Kauffman).

With respect to claim 1, Kauffman discloses a method in a data processing system for generating a notification of an event (abstract and column 29, lines 28-36), the method comprising:

responsive to detecting a presence of the event in a platform in the data processing system, generating a hardware interrupt to an operating system (column 29, line 58-column 30, line 12 and column 31, lines 19-21 – source instance generates inter-processor interrupt);

responsive to the presence of the event, storing the event in a partition queue associated with a partition firmware (column 29, line 58-column 30, line 12 and column 30, line 53-column 31, line 1 – source instance modifies appropriate event bit in bitvector or copies relevant event data to packet queue of target);

responsive to receiving a request to check the hardware interrupt in the partition firmware, identifying the event in the partition queue (column 30, lines 13-30 and column 31, lines 21-38 – target instance examines event data); and

responsive to identifying the event, processing the event (column 30, lines 30-38 and column 31, lines 38-43 – target instance calls appropriate processing routine).

With respect to claim 8, Kauffman discloses wherein the event has an event type and wherein partition queue associated with the event type (column 29, lines 40-50).

Art Unit: 2113

With respect to claim 9, Kauffman discloses wherein the data processing system is a logical partitioned data processing system having a plurality of partitions in which each partition includes the operating system (column 4, lines 34-45).

With respect to claim 10, Kauffman discloses wherein the request is generated in response to the operating system identifying a source for the hardware interrupt (column 30, lines 8-16).

Claims 11 and 18-20 are a means for performing the method of claims 1 and 8-10, respectively, and are rejected under the same rationale.

Claim 21 is a computer program product for performing the method of claim 1, and is rejected under the same rationale.

With respect to claim 26, Kauffman discloses a data processing system (figures 1, 2) comprising:

- a bus system (figure 1, item 122);

- a memory connected to the bus system, wherein the memory includes a set of instructions (figure 1, item 120); and

- a processing unit connected to the bus system (figure 1, items 108, 110, 112, 114), wherein the processing unit executes a set of instructions to generate a hardware interrupt to an operating system, in response to detecting a presence of an event in a platform in the data processing system (column 29, line 58-column 30, line 12 and column 31, lines 19-21); store the event in a partition queue associated with a partition firmware, in response to the presence of the event (column 29, line 58-column 30, line 12 and column 30, line 53-column 31, line 1); identify the event in the partition queue, in

Art Unit: 2113

response to receiving a request to check the hardware interrupt in the partition firmware (column 30, lines 13-30 and column 31, lines 21-38); and process the event, in response to identifying the event (column 30, lines 30-38 and column 31, lines 38-43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-7, 12-17, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kauffman in view of U.S. Patent No. 6,792,564 to Ahrens, Jr. et al. (hereinafter Ahrens).

With respect to claim 2, Kauffman does not disclose expressly wherein the processing step includes initiating a corrective action; and sending a notification to the operating system.

Ahrens teaches a method for reporting error events in a logically partitioned multiprocessing system (abstract and column 1, lines 9-15), which includes initiating a corrective action (column 5, lines 50-58); and sending a notification to the operating system (column 7, lines 9-14).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kauffman by initiating a corrective action and sending a notification to the operating system, as taught by Ahrens. A person of ordinary skill in

Art Unit: 2113

the art would have been motivated to do so because, although Kauffman discloses processing of events (column 30, lines 30-38 and column 31, lines 38-43), they are not restricted to error events which need to be corrected. However, since Kauffman does disclose taking action depending upon the processed event (column 29, lines 40-56), it would have been highly desirable to incorporate the teachings of Ahrens, to initiate corrective actions and send a notification to the operating system, in the event of an error.

With respect to claim 3, modified Kauffman discloses wherein the notification is an informational log (Ahrens – column 7, lines 9-18).

With respect to claim 4, modified Kauffman discloses wherein the processing step includes sending an error log to the operating system (Ahrens – column 7, lines 9-18).

With respect to claim 5, modified Kauffman discloses responsive to receiving the error log at the operating system, performing by the operating system at least one of a corrective action and a preventative action (Ahrens – column 5, lines 50-58).

With respect to claim 6, modified Kauffman discloses wherein the event is one of a thermal event or a power event (Ahrens – column 5, lines 42-47).

With respect to claim 7, modified Kauffman discloses wherein the processing step results in at least one of backing of data in a memory to a disk, freezing input/output operations, suspending kernel services, and monitoring the platform for additional events (Ahrens – column 5, lines 50-58).

Art Unit: 2113

Claims 12-17 are a means for performing the method of claims 2-7, and are rejected under the same rationale.

Claims 22-25 are a computer program product for performing the method of claims 2-7, and are rejected under the same rationale.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Guyton whose telephone number is (571) 272-3807. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2113

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PG
11/9/06

Robert M. Beauchamp
ROBERT M. BEAUCHAMP
ATTORNEY AT LAW
1000 17TH AVENUE, SUITE 1000
DENVER, CO 80202